

What is claimed is:

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*AB*

1. A high voltage transformer for a microwave oven, said transformer including a core and primary and secondary coils, and further comprising:  
an insulation molding part enclosing at least a part of said secondary coil  
and including a sensor accommodating portion; and  
a temperature sensor, accommodated in said sensor accommodating part,  
for detecting the temperature of the secondary coil.
2. The high voltage transformer according to claim 1, wherein said sensor accommodating portion is disposed inside of said insulating molding part.
3. The high voltage transformer according to claim 2, wherein said sensor is disposed directly adjacent to said secondary coil inside of said insulating molding part.
4. The high voltage transformer according to claim 2, wherein said temperature sensor comprises one of a thermostat and a thermistor.
5. The high voltage transformer according to claim 1, wherein said sensor accommodating portion is of a shape permitting said temperature sensor to be put into,  
and taken out of, said sensor accommodating portion.

6. The high voltage transformer according to claim 5 wherein said sensor accommodating portion comprises an external pocket forming element.

7. The high voltage transformer according to claim 4, wherein said temperature sensor comprises one of a thermostat, a thermistor and a fuse.

8. A method of manufacturing a high voltage transformer for a microwave oven, said transformer including a core, primary and secondary coils, and a temperature sensor for detecting temperature of the secondary coil, said method including the steps of:

    accommodating the secondary coil and the temperature sensor in a molder member;

    molding the secondary coil and the temperature sensor accommodated in the molder member into an insulating molding part accommodating the temperature sensor, and enclosing at least part of the secondary coil such that the temperature sensor is fixed in position relative to said secondary coil.

9. A method according to claim 8 wherein the molding step comprises molding a temperature sensor accommodating portion into said molding part in which said temperature sensor is accommodated.

10. A method according to claim 9 wherein said sensor and said secondary coil are molded together such that said sensor is disposed directly adjacent to said secondary coil.

11. The method according to claim 6, wherein the temperature sensor comprises one of a thermostat and a thermistor.

12. The method according to claim 11, wherein said sensor comprises a thermistor and a fuse.

13. A method of manufacturing a high voltage transformer for a microwave oven, the transformer including a core, primary and secondary coils, and a temperature sensor for detecting temperature of the secondary coil, and the method including the steps of:

providing a molder member for forming an insulating molding part including an external sensor accommodating portion;

disposing the secondary coil in the molder member; and

molding the secondary coil in the molder member to form said insulating molding part with at least a part of said secondary coil molded therein and to form said external sensor accommodating portion in spaced relation to said secondary coil so as to permit placement of the temperature sensor into, and removal of the sensor from, the sensor accommodating portion.

14. The method according to claim 13 wherein said external sensor accommodating portion is formed as a pocket defining member on an outside surface of the insulating molding part.

15. The manufacturing method according to claim 13, wherein the temperature sensor comprises one of a thermostat, a thermistor and a fuse.

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